

WHAT IS CLAIMED IS:

- 1 1. A tool for use by a machinist in testing the accuracy of a workpiece
2 comprising an elongated member having an edge for abutment with the workpiece
3 to be tested, an encased light source and a plurality of passages extending within
4 said member from said light source to said edge for conducting light emitted from
5 said source to an array of apertures spaced at intervals in a bevel of said edge, said
6 array of apertures directing the light at the workpiece on one side of said edge
7 whereby defects in accuracy are illuminated to a machinist viewing the workpiece
8 from another side of said edge.

- 1 2. A tool according to claim 1, said member having a chamber therein
2 encapsulating said light source.

- 1 3. A tool according to claim 1 further comprising a plurality of fiber optic
2 cords extending in said passages from said light source to said apertures.

- 1 4. A tool according to claim 1, said member being a machinist's straight
2 edge.

- 1 5. A tool according to claim 1, said member being a machinist's square.

BEST AVAILABLE COPY

1 6. A tool for use by a machinist in testing the accuracy of a workpiece
2 comprising an elongated member having lengthwise opposite first and second
3 edges for abutment with the workpiece to be tested, an encased light source and
4 first and second pluralities of passages extending within said member from said light
5 source to first and second bevels of said first and second edges, respectively, for
6 conducting light emitted from said source to first and second arrays of apertures,
7 respectively, spaced at intervals in said first and second bevels, respectively, said
8 first and second arrays of apertures directing the light at the workpiece on one side
9 of their respective edge whereby defects in accuracy are illuminated to a machinist
10 viewing the workpiece from another side of their respective edge.

1 7. A tool according to claim 6, said member having a chamber therein
2 encapsulating said light source.

1 8. A tool according to claim 6 further comprising a plurality of fiber optic
2 cords extending in said passages from said light source to said apertures.

1 9. A tool according to claim 6, said member being a machinist's straight
2 edge.

1 10. A tool according to claim 6, said member being a machinist's square.

1 11. A tool according to claim 6, said bevels of said first and second edges
2 being on opposite faces of said member.

1 **12.** A tool for use by a machinist in testing the accuracy of a workpiece
2 comprising an elongated member having an edge for abutment with the workpiece
3 to be tested, said edge having a lengthwise cavity therein, an encased light source
4 and a plurality of passages extending within said member from said light source for
5 conducting light emitted from said source to an array of apertures spaced at
6 intervals in said cavity, said array of apertures directing the light at the workpiece
7 whereby defects in accuracy are illuminated from within said edge to a machinist
8 viewing the workpiece from a position outside of said edge.

1 **13.** A tool according to claim **12**, said member having a chamber therein
2 encapsulating said light source.

1 **14.** A tool according to claim **12** further comprising a plurality of fiber optic
2 cords extending in said passages from said light source to said apertures.

1 **15.** A tool according to claim **12**, said member being a machinist's straight
2 edge.

1 **16.** A tool according to claim **12**, said member being a machinist's square.

1 **17.** A tool for use by a machinist in testing the accuracy of a workpiece
2 comprising an elongated member having an edge for abutment with the workpiece
3 to be tested, said edge having a lengthwise cavity therein, and at least one light
4 source within said member dispersing light into said cavity, said cavity directing the
5 light at the workpiece whereby defects in accuracy are illuminated from within said
6 edge to a machinist viewing the workpiece from a position outside of said edge.